

CLAIMS

What is claimed is:

1. An automated freezer comprising:
a removable cartridge for storing at least one item; and
a platform moveable within said removable cartridge in response to a request for said at least one item.
2. The automated freezer as recited in claim 1 further including a retention mechanism to retain a portion of said at least one item in the automated freezer when said cartridge is removed from said automated freezer.
3. The automated freezer as recited in claim 2 further including a buffer defining an inner passage, said buffer having a lower end and said retention mechanism, wherein said cartridge further includes an upper end, and said an upper end of said cartridge is received in said lower end of said buffer.
4. The automated freezer as recited in claim 1 further including a removal device and an exit opening, and said removal device removes said at least one item from said automated freezer through said exit opening in response to said request.
5. The automated freezer as recited in claim 4 wherein said platform raises after said at least one food item exits said automated freezer through said exit opening.
6. The automated freezer as recited in claim 4 further including a sensor, and said removal device removes said at least one item from said automated freezer through said exit opening in response to said request when said sensor detects said at least one item.
7. The automated freezer as recited in claim 4 wherein said removal device is pivotal.

8. The automated freezer as recited in claim 1 further including a controller associated with said automated freezer and a POS device, and wherein said request comprises a signal sent by said POS device.

9. The automated freezer as recited in claim 1 wherein said cartridge has a substantially circular inner profile.

10. The automated freezer as recited in claim 1 wherein said cartridge includes a first portion removably attached to a second portion by an attachment feature, and said first portion includes a first bottom end having a first half-circular cutout and said second portion includes a second bottom end having a second half-circular cutout, said first half-circular cutout and said second half-circular cutout define a circular cutout.

11. The automated freezer as recited in claim 10 wherein said platform has a platform diameter and said circular cutout has a cutout diameter, and said cutout diameter is greater than said platform diameter.

12. The automated freezer as recited in claim 10 wherein said cartridge includes a bottom edge having a cutout with a cutout dimension, and said platform includes a platform diameter, and said cutout dimension is greater than said platform diameter.

13. The automated freezer as recited in claim 2 wherein said retention mechanism is a plurality of arms moveable between a first position and a second position, and said plurality of arms enter said inner passage when in said first position and said plurality of arms do not enter said inner passage when in said second position.

14. The automated freezer as recited in claim 13 further including a resilient member that biases said plurality of arms into said first position.

15 The automated freezer as recited in claim 13 wherein said plurality of arms includes four arms.

16. The automated freezer as recited in claim 13 wherein said first position is substantially perpendicular to said second position.

17. The automated freezer as recited in claim 13 wherein said at least one item biases said plurality of arms into said second position.

18. A method for transferring at least one item from an automated freezer comprising the steps of:

loading the at least one item into a cartridge;

positioning said cartridge in said automated freezer;

sending a request to the automated freezer; and

automatically transferring the at least one item from said automated freezer in response to said request.